

METHODS AND APPARATUS FOR USE IN GENERATING DATA SEQUENCES FOR SPREAD SPECTRUM COMMUNICATIONS

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ABSTRACT OF THE DISCLOSURE

Methods and apparatus for use in generating data sequences for direct sequence spread spectrum (DSSS) communications are described. One exemplary method includes the steps of serially generating a pseudo random noise (PN) sequence by, for each count value i of a plurality of count values, retrieving from memory a bit of the PN sequence corresponding to the (i) th position in the PN sequence. The exemplary method includes the further steps of serially generating a Gold code sequence by, for each count value i of the plurality of count values, retrieving from memory a bit of the PN sequence corresponding to the $(i+n)$ th position in the PN sequence, retrieving from memory a bit of the PN sequence corresponding to the $(q \cdot i)$ th position in the PN sequence, and adding the bit corresponding to the $(i+n)$ th position with the bit corresponding to the $(q \cdot i)$ th position.